Abstract

Bitcoin, a decentralized P2P currency in recent years has gained a tremendous attention due to its ability to create anonymous financial transactions. This leads to bitcoins being the choice of currency for users having privacy as an important issue. Bitcoin mining, a process resulting in the generation of new bitcoins, is performed by miner operators for reception of incentives in the form of Bitcoins. To increase the profit this has given rise to bitcoin mining through botnet also known as miner botnet. In this paper we discuss how bitcoins are generated and how botnet generate bitcoing. We further analyze the network flow of two botnets namely Neris and ZeroAccess and provide a DNS relation in identifying the botnet. We further propose a framework and a security algorithm to protect our system from being a part of botnet thus protecting our system from attacks such as spamming, non-availability, DDoS etc.

References


pp. 127-140.


Index Terms

Computer Science

Information Sciences

Keywords

Botnet, Botmaster, Bitcoin, SHA-256, bitcoin mining, mining pool